

Adding Polynomials of a Single Variable

To add polynomials, identify terms with common exponents and combine them into a single term, summing the coefficients:

$$(2x^2 + x + 3) + (x^2 + 5x + 1) = 2x^2 + x^2 + x + 5x + 3 + 1 \\ = 3x^2 + 6x + 4$$

Now try these questions on your own

1. $(x + 1) + (x^2 + x) =$

2. $(4x^4 + 2x + 11) + (-3x^2 + x) + (x^4 - 2) =$

3. $(2x^3 - 7x^4 + 7x^5) + (11x^3 - 4x^4 - x) =$

4. $(9y + y^2 + 3y^3) + (9y^2 + y^3 + 3y^4) + (9y^3 + y^4 + 3y^5) =$

5. $(-2x - 3x^2) + (1 - 5x + 8x^2) =$

6. $(-x^2 + 2x + 5x^7) + (2x^6 - x^7) =$

7. $(-x + 5) + (2x^2 + 4) + (6x - 2x^2) =$

8. $(2z + 3z^5 + 5z^2) + (z + 2) =$

9. $(3s - s^5 + 4s^6) + (-3s + 2s^5) =$

10. $(2x^2 + 2x) + (3x^3 + 3x) + (4x^4 + 4x) =$

<http://math.about.com>